5: Schwimmer E-4,5 (1966-1967) 1973
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Mountain Orokaiva

## CHAPTER II

# THE SETTING

### 1. *Geography*

Although several good descriptions of the physical environment and general culture of the Orokaiva are available (e.g. Williams 1930, Waddell and Krinks 1968), a brief sketch of the setting of this study may be convenient. The Orokaiva live in the Northern District of Papua, a district bounded on the south-west by the Owen Stanley range, on the west by the Mandated Territory of New Guinea. Although the administrative centre of the district, Popondetta, lies only about 150 miles from Port Moresby, there is no road connection, so that the only communications with the outside world are by air and sea.

The Orokaiva live on the footslopes of Mount Lamington and on the plains to the north and east of these footslopes. This region is, by New Guinean standards, highly favoured by nature, as Brookfield recently emphasised (1966). In a classification of the natural resources of New Guinea according to the degree of limitations to land use[1], Brookfield describes a large territory surrounding Mount Lamington as 'suitable for cultivation with a mild degree of limitation'. This comprises 'some of the largest tracts of such good land in the whole country' (*ibid.* 47–8).

One distinguishing feature of the region is its lithological composition: there is an abundance of Pleistocene and recent volcanic deposits. The total area of such recent ash and lava deposits found in New Guinea is small, but notably fertile. Brookfield maps the annual rainfall of the region as between 100 and 150 inches. This is not so high that the land becomes permanently or semi-permanently waterlogged. On the other hand, the region mostly lacks well-marked dry seasons during which the soil would rapidly dry out. With regard to terrain, the region has extensive areas of low and moderate relief and good drainage. As for density of population, Brookfield paints a somewhat idyllic picture that needs correction: 'the greatest concentration of population, rising locally to 60 per sq. mile, lies on the best land in the area – the little-dissected footslopes of Mount Lamington, where smooth topography is combined with fertile soils and good drainage' (*ibid.* 64).

We find, in fact, that local densities of 200 and more per sq. mile are not at all rare (Rimoldi 1966: 4). In two villages I surveyed, I found population densities to be 180 (Sivepe) and 135 (Hohorita) per sq. mile. Rimoldi's analysis shows that the Sivepe population density is close to the upper limit the land can sustain with present technology and social organisation. The sample he chose (50 persons of the Jegase and Timumu clans) happened to have under-average land holdings, of 138 acres. Rimoldi shows that 110 of these acres are needed for

[TEXT CONTINUED ON PAGE 15]

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subsistence shifting agriculture alone. This leaves hardly any margin for land unsuitable for cultivation, for bush land needed as a source of building materials etc., or for unequal distribution of land as between families.

We may divide the land occupied by Orokaiva into two broad sub-regions. The first is made up of the foothills themselves which have an 8 to 12 inch very dark brown top soil, rich in nitrogen and phosphorus. The fine-textured subsoils range from 10 to 22 inches in depth. This sub-region coincides approximately with the Saiho census division which had a population of 8,211 in 1966 giving a density of about 55 per sq. mile. The second sub-region, situated to the north and east of the first, consists of poorly drained but readily improvable plains. Here the population is very much sparser. Most village domains contain only a fraction of immediately utilisable good cultivation land and even this does not have the special fertility of the volcanic loam on the mountain slopes. The soils of Inoda, a village situated in this sub-region, have been discussed in much detail by Crocombe and Hogbin 1963, quoting the Commonwealth Scientific and Industrial Research Organisation (C.S.I.R.O. [1954]). This sub-region forms part of the Sohe-Popondetta census division which, as a whole, has a population density of about 20 per sq. mile. Villages are smaller and more dispersed.

The boundaries of what we may call the Orokaiva tribal area are probably best determined by the criteria used by the Papuans themselves, namely linguistic criteria. Orokaiva is part of the Binandere group of eight languages (see Wurm 1960) spoken in most of the more densely populated parts of the Northern District; of these languages, Orokaiva is spoken by the greatest number, but only about half the population in the Ovokaiva-Binandere area. The only language of this group for which a reasonably full description (grammar and dictionary) has been published is Binandere (Copland King 1927), a language spoken around the lower part of the Mambare and Gira rivers. Other languages of this group are: Orokaiva, Notu, Aiga, Huniara, Yema, Taindaware. While there are considerable vocabularly differences between these languages, there is a close resemblance in grammar and enough resemblance in vocabularly to make a very limited degree of intercommunication possible. (Chinnery and Beaver 1916 and an unpublished manuscript by Capell [n.d.]). We do not know much more about the Binandere group of languages except that it is a Papuan grouping (Grace 1968).

It seems to me that dialect divisions within the Orokaiva language area which have been noted at various times (Beaver 1916, Williams 1930) are rather minor. A fairly accurate idea of the boundaries of the Orokaiva language area may be obtained by identifying this area with the district administered by the Higaturu Local Government Council which covers the Saiho and most of the Sohe-Popondetta census divisions.

Williams (1930: 157–9) attempts to distinguish the Orokaiva language speakers from other tribal groupings by listing cultural differences (notably in dress and ornaments) but these are not pronounced and, under modern conditions, may be observed only on ceremonial occasions when headgear and bark-cloth are worn.

Prior to European contact, the normal mode of settlement was in hamlets containing 6 to 12 houses and surrounded by land used for shifting agriculture.

[TEXT CONTINUED ON PAGE 18 ]

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**TABLE II/1**

**NORTHERN DISTRICT: POPULATION 1966**
(*Source*: Department of District Administration, Popondetta)

| | | | |
|---|---|---|---|
| *Popondetta Sub-District* | | | |
| *Afore* | | | |
| Musa | 2509 | | |
| Managalase | 5550 | 8059 | |
| *Ioma* | | | |
| Aiga | 2384 | | |
| Binandere | 3693 | | |
| Waria | 1717 | 7794 | |
| *Popondetta* | | | |
| North Coast | 4660 | | |
| Sohe – Popondetta | 3588 | | |
| Popondetta | 3533 | | |
| Oro Bay | 5181 | | |
| Saiho | 8211 | 25173 | |
| *Town* | | | |
| Locals | 900 (approx.) | | |
| Europeans | 300 | | |
| *Rural* | | | |
| Locals | 800 (approx.) | | |
| Europeans | 260 | 2260 | |
| *Total* | | | 43,286 |
| *Tufi Sub-District* | | | |
| Cape Nelson | 3642 | | |
| Collingwood Bay | 2936 | | |
| Dyke Ackland Bay | 1724 | | |
| Europeans | 20 | 8322 | |
| *Kokoda Sub-District* | | | |
| Kokoda | 2018 | | |
| Hujara | 3195 | | |
| Wawonga | 1227 | | |
| Europeans | 30 | 6470 | |
| *Total* | | | 58,078 |

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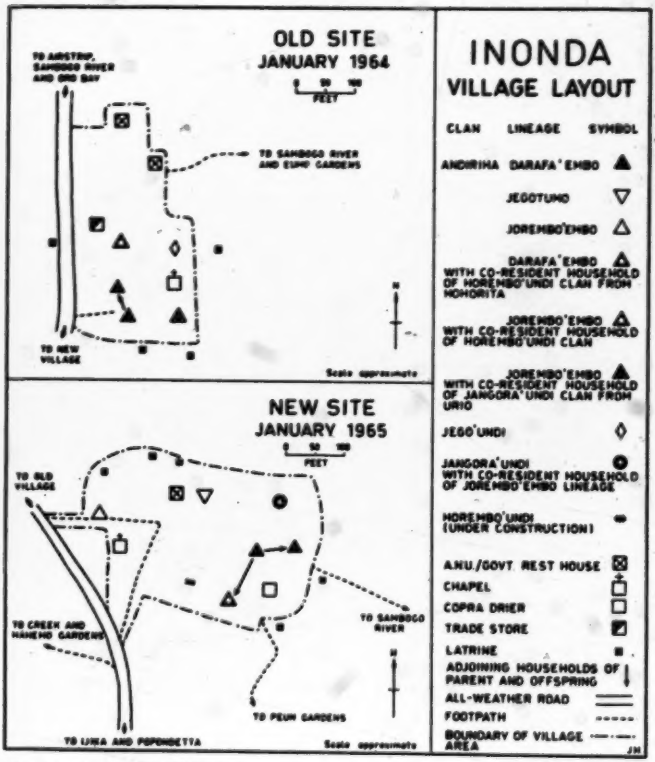


Fig. 4. Inonda village layout.

The leader, a government driver, earned about 65 per cent of the total cash income of the whole village, not only in wages but also through various enterprises on the side. He was the lay preacher as well. The only limit to his influence was the unwillingness of the pagan faction to become involved in 'modern' activities of which he was the champion. 105 622 177

Ecologically, Inonda is characteristic of the alluvial plains region to the east of the mountain. It lies between 200 and 300 feet above sea level, and has a comparatively low rain-fall and long dry periods. Its population density is low: 42 people on a village domain of 2850 acres (less than 10 per square mile). The best Inonda land is 580 acres of coarse-textured recent riverine deposits, covered with forest or regrowth and lying beside the Sambogo and Girua rivers. 133 132 161 162 134 137

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*Hohorita.* My stay in Hohorita lasted for a month, and I made several return visits. This village lies thirteen miles from Popondetta on the road to Saiho, has forty-one dwelling houses and a population of 358. Hohorita and three contiguous hamlets are the home of the Sangara who survived the Mount Lamington disaster. The Sangara population was reduced by the eruption from some 3,000 to 195 people, who stayed together in the evacuation camp and later founded Hohorita, where the remnants of about a dozen clans may be found. By far the strongest clans in this village are those whose homes, at the time of the eruption, were at the outer edge of the devastation area and who were able to run away from the *nuée ardente* before the searing blast could reach them.

Hohorita, though built much earlier than Inonda (1957), was not beautified with the same care. The area between the two rows of houses was bare, except for some coconut and betelnut palms. The village was divided into two rectangles by a short row of houses. The front and back part were settled at different times and different clans were dominant. When I was working in the front half I would meet hardly anyone from the back half and vice versa. A feast house had been built in both the front and the back sections of the village. The feasts had been held just a few weeks before my arrival, to entertain neighbouring villages. Originally a combined feast had been planned, but disagreement had prevented it. There was no chapel in the village, but a mission station just next to it, with a white mission teacher, a mission school and several Papuan teachers who were in charge of church services. This was a contrast with Inonda, which was several miles removed from a school and even further from a mission. There was a woman's club with a small club house, but again this was supported by only a small minority.

Hohorita was entirely Christianised, in the sense that everyone had been baptised. A number of the older men had been educated in a mission station prior to the eruption and had become mission teachers while evacuated. When coffee became a lucrative cash crop – more lucrative than teaching – many of them had retired to the village. As a result the leadership pattern differed sharply from Inonda. About twenty men in Hohorita had held down occupations requiring some European skills, and these men tended to work out together the everyday and long-range decisions required in the village. The leading personality was, at that time, a well-educated man, who for years had been the chairman of the Higaturu Local Government Council. In Hohorita virtually everyone was growing coffee. Some men worked in the plantations nearby.

Ecologically, Inonda is characteristic of the alluvial plains region to the east of the Lamington foothills. Before the eruption, the concentration of population was entirely on the higher reaches of the tribal domain as rainfall and fertility are higher there. The lower portion of the territory, away from the mountain, was used for hunting. But the government discouraged reoccupation of the higher land, for fear of further eruptions. Hohorita is lower down than the old villages. The more elevated land is used a little less than before, and often for coffee rather than subsistence crops. The topsoil is volcanic loam; the rainfall is probably between 120 and 150 inches per annum. Population density is 135 per sq. mile. This is a little less than is usual on the Mount Lamington foothills, but prior to the eruption the population must have been very dense indeed.

*Sivepe.* I stayed in Sivepe for about nine months, from September 1966

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Sivepe has twenty-four dwelling houses and a population of 137. The two politically dominant clans are Jegase and Seho, but some families from the Sorovi clan had not long ago migrated to Sivepe from a neighbouring village (Garombi). Sivepe had been shifted recently to the present site so that decorative borders were not yet established, though such improvements were started during my stay. It was planned that the village would be rectangular in shape, with two long facing rows, as in Hohorita and Inonda, but a third row, supposedly temporary, had been established on the hill behind the planned site. In other respects, however, the same standard of village layout had been followed. The houses were roomier than in the other villages and had walls of horizontally laid shingles, an innovation of which the villagers were rather proud.

Sivepe has no chapel, but the Anglican mission station is less than a quarter of a mile away from the village. The school conducted on the station is one of the best in the Northern District; it teaches up to grade six and many of its students qualify for admission to secondary schools. The station also maintains a small field hospital, with a Papuan assistant medical officer in charge. For more serious cases the large government hospital at Saiho was used, a facility serving the whole of the Northern District, but in practice out of reach of distant villages like Inonda. Hohorita people, however, use it frequently.

Sivepe has been Christianised only very recently. There were no baptisms until after the eruption and the Seho clan did not join the Church until about 1963. Today very few pagans are left and they do not form a political or other faction. Leadership is shared between several strong personalities. Sivepe lacks residents who stand out by superior wealth or European education, but is rather more homogeneous in that respect than either of the two other villages. Money comes mainly from coffee and from remittances sent by relatives working outside the village.

Sivepe, like most of the Sasembata-Sohu valley, has an extremely dense population – about 180 per sq. mile.

## REFERENCES

1 Brookfield uses the Klingebiel and Montgomery (1961) classification of land which distinguishes land areas by the degree of limitation to land use imposed by geographical conditions. Limitations may be due to terrain, lithology, soil, or climate. A large territory surrounding Mount Lamington falls in classes I to III (which means it is suitable for cultivation with a mild degree of limitation), as contrasted with most of the rest of New Guinea, where the limitations are much greater.

2 Figs. 1 and 2 give a general impression of the geography of the district: land systems, natural features, settlements roads, tribal areas, etc. Table II/1 shows the distribution of population in the Northern District of Papua. Table II/2 shows the age breakdown of the population in Sivepe and Inonda. Table II/10 shows rather strikingly how suddenly labour migration began: the men of the Seho clan of Sivepe were just a little too old to have been involved, but the Jegase clan, whose members were slightly younger, mostly spent some time on jobs outside the village before or shortly after marriage.

3 Orokaiva: *ina*; botanical: *sacharum edule.*

## Chapter 1

## Introduction

There is no local consensus as to which peoples in the Northern District should be regarded as Orokaiva (see Williams 1930:1-4), but all the peoples concerned recognize that they have a relatively uniform culture and speak mutually intelligible dialects of one language. The people in this culture area number at least 25,000.

Although they did not have an inclusive name for themselves until 'Orokaiva' was introduced by Europeans, they generally drew the distinctions among themselves between river people, salt water people, and inland people (umo-ke, eva'embo and periho). There are wide-spread traditional beliefs dealing with the common origins not only of these different categories of people, but also of mutually hostile tribes, the largest political units among them, and of the various dialectal groupings and local cultural variants, which correspond to a limited extent with the political division into tribes.[1]

Our study of Sivepo was designed to complement a study of land, work and productivity at Inonda village (Crocombe and Hogbin 1963) and other related studies in the area (Dakeyne 1965; Howlett 1965; Crocombe 1964; and Cheetham). We attempt no general comparison with the results of the other studies at this stage.

Because land tenure problems were central to our investigations, the groups at Inonda and Sivepo were chosen from villages in the Higaturu Native Local Government Council area which is occupied by about 12,000 of the Orokaiva. In 1956 this council adopted a scheme to register individual title to parcels of land which would be allocated by land-holding groups to individual members for use as cash-crop gardens. The scheme had encountered several

[1] See Williams 1930:155; W.47, 140, 148; O.40, 411, 486, 598, 640; Folktales Nos.45, 54. W.47,... O.40,... Folktales, etc., refer to the notation used by Williams in his fieldnotes, see Bibliography, p.121.

423 obstacles,[1] but the policy of registering villagers' land was being implemented at the time of our surveys.

121 Inonda and Sivepe alike had experience with their council's registration scheme. The principal reason for working with these villages in particular is that they may be regarded as typical of two extremes among local communities in the council area. The following conspicuous variation was taken into account, in view of the need to investigate the relation of local conditions and problems to economic change in general and to the council's tenure scheme in particular.

161 Sivepe is located in the Saiho Census Division which has an overall population density of 75 persons per square mile, but there are local concentrations of much higher density, for example, 237 persons per square mile at Sivepe;[2] the density of the Saiho Division is the highest in the Northern District and the third highest among the rural census divisions in Papua,[3] but does not approach the densities found in several places in the New Guinea Highlands.[4] The density of the Buna Census Division where Inonda is situated is about 8 persons per square mile, the lowest among the Orokaiva.

133 The average size of Saiho villages is about 175 persons,
132 compared with an average of 100 in the Buna Census Division. The Sivepe people live on the highly fertile slopes of Mt Lamington,
131 receiving an annual rainfall of about 160 inches; Inonda's land is lower, flatter and comparatively poor and receives about 95 inches a year. Inonda is 11 miles from Popondetta on the road to Oro Bay and Sivepe is roughly twice as far from the township, along a road leading inland.

101 For brevity we will speak of the 'mountain Orokaiva' as an
[133] alternative to 'Mount Lamington Orokaiva'. (See Keesing 1951:5-6.)
[162] This group, we believe, was the largest socio-political unit, the

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[1] For an account of the developments of the registration scheme see Crocombe and Hogbin 1963:89-93.

[2] Population is over 8,000 and there are 8.6 acres available per head in the census division. The personal opinion of at least some local officers has been that local densities of 200, and more, persons per square mile are not at all rare in the division.

[3] After Kaipi, Gulf District and Kubuna, Milne Bay District.

[4] However, Keesing (1951:2) maintained that these Orokaiva on the Mt Lamington slopes achieved 'perhaps the densest settlement patterns of any of the shifting "dry" cultivators in the New Guinea area'.

743 The Public Health Department maintains a large base hospital
366 at Saiho, 5 miles from Sivepo. A vegetable market at Saiho, originally established to supply the hospital, now serves a wider range of customers and at present is open every Thursday and Saturday (E. Waddell: personal communication). A few Sivepo
[432] people in our sample sell vegetables there regularly but seldom
[438] buy anything except lime (for chewing with betel nut). There are well-stocked trade stores at Saiho and Awala and a Savings Bank agency at Awala. In 1963 a trade store was established near Sasembata, by a member of Kongahambo village.

177 We could not complete this introductory sketch of local
648 facilities and conditions without noting the traumatic experiences of the mountain Orokaiva during the life-span of the older men. Even an abbreviated description of local attitudes towards introduced economic and social changes such as we attempt later, would be inadequate unless it alluded to the likely deep impact of the following events.

First, the early government patrols, which encountered widespread opposition from the Orokaiva, were attacked most persistently by the 'Wasida' people who include the Sivepo villagers. Fighting was fierce and many of the old men we talked to had been close relatives killed or wounded.

Second, during World War II the paths of advance and retreat of Australian and Japanese troops crossed this area and the
[121] Orokaiva were 'drawn in as helpers, willingly or unwillingly, on both sides of the lines'.[1] Some Orokaiva groups also became involved in intertribal skirmishes at this time - during our stay an imminent military exercise occasioned apprehensions among some Orokaiva about a possible resumption of dormant intertribal conflict at the time of the exercise.

Scattered for safety in the bush while the wartime campaigns swept the area, many people in the neighbourhood of Sivepo died of malnutrition. In addition, there was very thorough recruiting
[161] of local men for subsequent phases of the war elsehwere in the Territory. In 1948 patrol staff reported that there was cause for concern in the continued decline in population.[2] At this

[1] Keesing 1951:8. For an account of this episode see McCarthy 1959: Ch. 4, 10 ff., see esp. pp.110, 126n and maps pp.123, 357.

[464] [2] The war was said to have been a contributing factor; moreover, many villagers were employed as labourers on local European plantations and returned only at weekends; more important, the percentage of able-bodied males absent elsewhere as indentured labour had reached 31 and the officer accordingly recommended in 1948 that the area including Isoge, Isivita and Awala villages be closed to recruiting.

177 time the process of readjustment and restoration was still a
648 major question demanding attention. A few years later the third misfortune occurred.

731 The eruption of Mt Lamington, which caused catastrophic loss of life and dispossessed many people of their land,[1] left deep impressions on the minds of the survivors, particularly an acute sense of guilt which has been widely remarked upon. They felt that God had punished them for not helping the Allies enough during the war, and for not heeding the wishes of the mission and the administration. Some observers ascribed both the marked spirit of co-operation noticeable in evacuation camps and the avowed intentions of many to obey government directions in the future, to these negative feelings (Belshaw 1951:3-6; Keesing 1951:5). By this time 'population trends indicate that with the present percentage of children, there are likely to be considerable increases in the future' (Plant 1951:4). The area was closed for recruiting but this did not solve the problem of the supply of labour for reconstruction because men were drawn back to their casual jobs on local rubber plantations and the mission asked each village to work a day a week rebuilding mission stations (Belshaw 1951:8).

[101] [464] [797]

657 After the war, compensation was paid for property of the
[731] villagers which had been damaged or destroyed, and following the eruption a programme of resettlement and rehabilitation was instituted.

121 For our investigations, Sivepe was chosen from the villages in
127 the Saiho Census Division mainly because it had been one of the sample villages in the Survey of Indigenous Agriculture conducted by government departments of the Territory and of Australia on behalf of the Food and Agriculture Organization's World Survey of Subsistence Agriculture. Information from the survey has provided quantitative material which, though summary, is directly comparable with results of our short survey of subsistence cultivation. The F.A.O. survey's sample was chosen by statistical methods.[2]

121 The interest which governed our own selection of a sample of
125 manageable size from among Sivepe villagers - and comparable with

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[1] Several thousand of the Orokaiva on the slopes of the volcano were killed by the clouds of hot dust emitted at about 200 m.p.h. and 200°C. Sivepe was just beyond the limits of the area destroyed. The villagers spent about a year's enforced absence in evacuation camps (see p.76), but some neighbouring people who survived were absent from their land for far longer periods.

[2] Walters 1963:4.

The Orokaiva comprise a number of groups, with mutually intelligible dialects and a high degree of cultural uniformity, extending some sixty miles northwards from the Hydrographers Range and from the coast inland to the foothills of the Owen Stanleys. The overall population density is only 9.1 persons per square mile but the distribution is highly uneven (see Table 1.3) with major concentrations on the fertile northern slopes of Mt Lamington (63.8 persons per square miles in the Saiho census division) and the coastal periphery (62.2 in Gona census division). The grassland and more northerly forest areas are only sparsely populated.

Table 1:3

Popondetta sub-district: demographic characteristics of selected census divisions, 1963

| | Crude population density (persons per square mile) | Cultivable acres per head | Mean size of settlement |
|---|---|---|---|
| Saiho | 63.8 | 9 | 216 |
| Gona | 62.2 | 6 | 221 |
| Oro Bay | 43.6 | 9 | 103 |
| Sangara | 26.7 | 9 | 197 |
| Popondetta | 17.2 | 19 | 109 |
| Togahau | 16.9 | 25 | 146 |
| Asigi | 9.1 | 53 | 87 |
| Buna | 8.4 | 31 | 94 |
| Huhurindi | 6.7 | 53 | 69 |

Source: Population data derived from DDA 1963 census data (1961 Popondetta, 1962 Saiho).

Small villages are the characteristic unit of settlement, with houses disposed in a more or less rectangular form around a central earth or grass 'square'. Their size varies in relation to overall population density, but nowhere exceeds 720 persons,[1] the mean being 144 persons. The social organisation and economy of the Orokaiva contribute to considerable instability in settlements, both in composition and site.

A village normally contains more than one clan branch[2] and consequently is not necessarily a landholding unit. Its members may have closer ties of kinship with residents of other villages than

[1] Kiorota village in Saiho census division.

[2] See p.10.

## Introduction

121 The New Guinea Research Unit of the School of Pacific Studies of the Australian National University invited the author to evaluate the cognitive ability of groups of subjects who were being studied as part of a larger project. These were the Orokaiva people of the Northern District of Papua. Other related studies in the area had been or were being carried out at Inonda (Crocombe and Hogbin 1963), Gona (Dakeyne 1965), Sivepe and Borugasusu (Rimoldi 1966a, b), Ongoho (Crocombe 1964), the ex-servicemen's settlement scheme (Cheetham 1963) and in expatriate plantations (Howlett 1965).

131 197 The Orokaiva live on the Popondetta plain and in the Mt Lamington foothills, and share mutually understandable languages. They have been described by Crocombe (1963) as follows:

105 [161] [619] [423] [614] The Orokaiva people number roughly 26,000 and are divided into about twelve tribes. The tribes are very loose units and recognise no single leader and before European contact, warfare within the tribe was not uncommon. ...there are no land rights at a tribal level. Each tribe is divided into a number of named clans. A clan is seldom localised, and usually it is divided into a number of sub-clans which are dispersed over various parts of the tribal territory. Each sub-clan holds rights over a specific area or areas of land.

177 795 There has been European contact of some form over a long period. The people are perhaps best known by the work of Williams (1928 and 1930) in which he describes the earlier cult movements and the attempts to master and control new contact situations. Two of these were the cult of the Baigona men and the Taro cult. The former was concerned with healing and sorcery through a type of priest who was in communication with the spirits of the dead and now resident in various reptiles, particularly the snake. The latter was evidenced in sorcery through a priest who was possessed with the spirit of the Taro. Violent dancing or ecstatic movements often accompanied by a trance were not unlike the dance of St Vitus or St John which swept Europe in the fourteenth century (Sargant 1957).

648 177 The initial Japanese occupation of Papua took place in the Northern District as the Japanese marched towards Port Moresby via

## Changes in the Yega settlement pattern after 1960

361 178 Influenced by rapid changes in land use, the location of Yega residences radically altered after 1950. Figs 1, 2 and 3* illustrate the evolution of settlement up till 1950. In 1950 the Yega lived in small villages spread along four miles of coastline. In 1952-3 occurred the major amalgamation of dwellings into Beporo (166) village already mentioned (p. 29). Members of all clans took part in this move. Although none of the other villages went out of existence at this time, all diminished in size while Beporo grew 161 162 rapidly. Table 4 shows the estimated distribution of population

[TEXT CONTINUED ON PAGE 42]

Table 4

361 162 103 161 Distribution of total Yega population by villages in 1960, 1962, and 1964

| | Village name | 1960 estimated | 1962 November | 1964 July |
|---|---|---|---|---|
| A. | Coastal | | | |
| | Surilai | 60 | 52 | 61 |
| | Niniyanda | 44 | 9 | 5 |
| | Kanaunje | 15 | 17 | 11 |
| | Basabuga | 17 | 19 | 14 |
| | Tarebosusu | 7 | 10 | Nil |
| | Banumo | 14 | 8 | 10 |
| | Goabe | 19 | 15 | 19 |
| | Siumbago | 9 | 13 | Nil |
| | Beporo | 335 | 275 | 164 |
| | Gona Mission | 7 | 6 | 18 |
| | Subtotal | 527 | 424 | 302 |
| B. | Inland | | | |
| | Gatara | 6 | 6 | 6 |
| | Konje | Nil | 6 | 97 |
| | Otobejare | Nil | 8 | 13 |
| | Imangada | Nil | 3 | 8 |
| | Mumburada | Nil | 17 | 47 |
| | Ononda (D.A.S.F.)* | Nil | 5 | 1 |
| | Ononda | Nil | 41 | 66 |
| | Binjapada | Nil | 51 | 61 |
| | Jamberoda | Nil | Nil | 15 |
| | Subtotal | 6 | 137 | 314 |
| | Total | 533 | 561 | 616 |

* Department of Agriculture, Stock and Fisheries indicated that these informants had made no attempt to build houses of their own but were using the facilities available at the D.A.S.F. Ononda settlement.

A. [For figs. 1, 2, & 3, see Category 361, p. 41--Analyst]

161 162 in 1960[1] compared with the distributions determined by personal interview in November 1962 and July 1964.

361 166 242 245 Table 4 and Figs 4 and 5 illustrate the movement of people away from the coastal villages and the rapid increase in number and size of inland villages which followed the implementation of the Yega Scheme in mid-1960. The men interviewed gave two main reasons for this move inland. The men who were allocated a cocoa block moved so that they would be closer to this new field of work; those who were not allocated blocks moved in order to remain near to their relatives.

361 166 The movement inland began immediately after the start of clearing the cocoa blocks. In July 1960 a young unmarried man of Seseko clan moved from Beporo and took up residence in the D.A.S.F. settlement. He was soon followed by others from Seseko clan, many of them from Kanaunje and Niniyanda villages. These villages are furthest from the cocoa blocks and, being backed by swamps, have more difficult routes of access than other Yega villages. Convenient village sites were available for the newcomers on two patches of grassland known as Ononda and Binjapada. Seseko clan claimed [423] hunting rights to Binjapada and a Seseko lineage claimed cultivation rights to Ononda which had been used by Seseko members as a food garden some years previously. There was therefore no dispute over building sites. Even when some members of clans other than Seseko desired to move from the coast in 1962-3, they were allocated building sites on Seseko land close to the houses of Seseko members. The growth of Binjapada and Ononda villages is shown in Table 5.

The result of the migration inland was the development of a 'ribbon' pattern of settlement along the Gona-Popondetta road (Fig.5). A Binjapada was likewise a ribbon pattern on a side road. The houses in Binjapada were much farther apart than in the coastal villages. This is because the house sites were located close to cocoa blocks (Fig.6). A

A development which might have far-reaching effects upon the future Yega settlement pattern was the attempt by several holders of cocoa blocks to locate their dwellings upon the projected extensions to their blocks (Fig.6). As early as November 1962 the holder of block 16 had moved his home from Beporo village to a site on Binjapada grassland which he calculated would be the extension of his block (see Fig.6). By July 1964 his example had been

[TEXT CONTINUED ON PAGE 43]

A, B, [For Figs. 5 & 6, see Category 361, pp. 45-46--Analyst]

[1] Calculated from the census taken by the author in 1964. Some degree of error is possible because of the movement of paid employees and their families.

new crops and techniques of production; and which is best adapted to the emerging patterns of social and work organization. It is also hoped to obtain information on the factors which influence the peoples' preferences for one or another of the systems of land tenure and work organization.

It is appreciated that no two human groups are strictly comparable, and that there are cultural, geographical and economic differences between different parts of the Orokaiva area. On the other hand, there is a sufficient degree of homogeneity to allow some useful comparisons to be made between those who follow each of the various "roads" to economic change.

This paper contains the results of the first study undertaken. It was carried out in the Higaturu Local Government Council area at the village of Inonda, which is one of the small, widely dispersed Orokaiva villages which are typical of the flat eastern portion of the area. A second study within the Council area has recently been completed at the village of Sivepa, which is cooler, more hilly and more fertile than Inonda, and typifies the larger, more populous villages of the closely settled western area.(1) The results of research in other parts of the Orokaiva area will be published in the coming months.

We wish to record our gratitude to the people of Inonda for their generous co-operation, to Mr. Cromwell Burau for interpreting not only the language but also the culture of the Orokaiva people for us, to officers of the departments of Native Affairs and Agriculture for advice and assistance, and to Dr. D.G. Bettison and Mr. M. Rimoldi for assistance in revision of the final draft. We also gratefully acknowledge the assistance of the Rural Credits Development Fund of the Reserve Bank of Australia.

(1) Population density in the Saiho census division (which includes Sivepa) is 72.9 persons per square mile, which is the highest for the Higaturu Council area. Density in the Buna census division (which includes Inonda) is 7.7 persons per square mile, which is the lowest in the Council area.

position will be insecure.

The man who resides in the village by virtue of the fact that two of his daughters are married to Andiriha men has been invited to plant coffee in Inonda but he considers the risk of future dispute too great to do so. He is therefore planning to return to his village of origin to plant cash crops and has already begun clearing there.

The one man who has planted cocoa on Inonda land did so, not on his own lineage land, but on that of another lineage which has no adult members at present. But the mother of the children whose lineage holds primary rights to the land has objected strongly and has succeeded in stopping him from expanding his plantings. One other Andiriha man staked out land and planted shade for cocoa, again on the same land of the other lineage mentioned, but has been prevented from planting.(1)

Partly as a result of the uncertainty of their tenure the villagers are again considering shifting the village site.(2) Several possibilities are being considered. Some wish to move to land held by an Andiriha sub-clan which lives at Hohota and which has close links with the Inonda sub-clan. These point out that they have no certainty of tenure for their cash crops on the existing land, whereas at Hohota there is land which is

(1) This dispute resulted from the fact that when the last adult member of the lineage died, his wife remarried and her new husband "adopted" her children. Those who moved onto the land reasoned that as the children had been adopted, the local branch of the lineage had died out and the land was available for use by any member of the sub-clan. The mother, on the other hand, claimed that the children would not inherit land from their adoptive father but from their born father. She won her point by threatening to complain to Native Affairs officers who, the villagers said, would undoubtedly have supported her.

(2) This is not the only reason for moving, and the prevalence of sorcery in the present location is felt to be responsible for the supposed excessive death-rate. (There has in fact been a decline in population from 60 in 1949, to 49 in 1957, 45 in 1960 and 43 today). The Allied Geographical Section (1942, Appendix G) gave the population as approximately 120 in 1942, but the accuracy of this figure is in doubt.

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[A villager shows off the fighting head-dress of his father. It is intricately made of boar tusks, shells, feathers, and horn-bill beaks.]

# THE YEGA OF NORTHERN PAPUA

131
36
[161]

THE Yega is a group of nearly 900 people living in sixteen settlements, on an area of about twelve square miles, on the north coast of Papua. They live on a gently sloping alluvial plain between Mt Lamington and the sea. Yega territory is bounded by one large stream and crossed by several small creeks.

137 The plain was originally covered by mature rain forest 100-120 feet high, interspersed with elongated strips of grassland. Now, much of the original forest has been cut down, and secondary forest forty to fifty feet high has

132 replaced it. The climate is hot and wet throughout the year (Köppen Af.) but there is marked seasonality of precipitation. The north-west monsoon, November to April, brings two-thirds of the annual rainfall (average 100 inches per year); July and August with about four inches per month are relatively dry. The temperature is over 80°F on most days and rarely falls below 70°F on the coolest night, but the heat is alleviated by north-easterly sea breezes which blow during the afternoon and evening throughout the year.

175 The first reported contact between Europeans and Yega was during an expedition
177 along the coast by the Lt Governor of Papua,
799 Sir William McGregor, in 1895, but the first real step in the process of change occurred with the establishment of an Anglican mission
177 school on Waususu Point in 1909. From this
464 time until the outbreak of World War II,
466 Yega men began leaving their villages to work

[P.5-A]

134 the mune of Sivepa, but it is far shallower, less well drained and
[241] covered with kunai grass (predominantly imperata sp.). It is not used for gardens because of the difficulty of freeing the ground from grass roots. (ii) the Girua Association: coarse textured, recent riverine deposits lying beside the Sambogo and Girua Rivers. This soil, called tumene is the favourite gardening land. (iii) the Warisota Association: recent, well drained medium textured clay loams, becoming fine textured with depth and found on the Hydrographers foothills. They are grey to grey brown, and are called hora or hoheri. They are not favoured (though occasionally used) for gardens, as they tend to dry out during the dry season, which is much longer and dryer than at Sivepa. The other two soil types are too stony or sandy to be used for anything except foraging and hunting.

162 There is a striking difference in population density between
161 the two districts. Sivepa, with a population of 137, occupies and owns about 0.75 square miles of land, an average of about 180 persons per square mile. We may compare this with Inonda, with a population of 45 and about four square miles of land--an average of 11 persons per square mile. Sivepa is not at all untypical for the Saiho Census Division in which it is located; this is the division which includes the Mount Lamington foothills as well as some sparsely populated areas in the vicinity. Average population density in this division is 75, with local densities of 200 and over "not at all rare" (Rimoldi, 1966: 4). Inonda also has a population density characteristic of the census division in which it is located; the Buna Division is occupied by about eight persons per square mile (see Table 6).

161 Rimoldi's analysis shows that the Sivepa population density
311 is close to the upper limit the land can sustain with present technology and social organisation. The sample he chose for study (50 persons of the Jegase and Timusu clans) happened to have less land than the average, namely a total of 138 acres. He showed that of this area, 110 acres are required to maintain present standards of subsistence agriculture (1966: 20-21). This leaves hardly any margin for land unsuitable for cultivation and for unequal distribution of land as between families. It also makes little provision for a balance of forest land which must be preserved, as forest resources are essential for the maintaining of the Orokaiva economy. It is true that the other major Sivepa clan (Saho) has greater land resources, and that the Saho people allow the others to use forest trees from their land for building and other purposes. Nonetheless, land resources are almost as tight as they can be.

In contrast, Inonda has plenty of room. When Sova Village joined Inonda after the eruption, there was plenty of garden land for everybody. Crocombe and Hogbin claim that 580 acres may be classed as good garden land, whereas the present level of subsistence gardening can be maintained with 127 acres (1963: 10).

## CHAPTER VI: Addition and Loss of Community Members

161 Though the population of Sivepe has increased between the years 1951 and 1967, this increase is less than might have been expected after the settling in Sivepe of two additional Jegase families and six Sorovi households. An analysis of Table 16 will show that the net population increase in 16 years corresponds very closely to the increase due to the immigration of 15 Jegase and 26 Sorovi people into Sivepe. The 1951 figures showed 40 children who, today, should range between the ages of 17 to 35; 15 of these were boys. Looking at the present Sivepe population, we find only six men of that age group and only three of these were children in Sivepe in 1951 (the other three are immigrants). This depletion of the 17-35 year age group is one of the most strking features of the present population structure.

166 The second striking change is in the number of children--there are almost twice as many of them in Sivepe today as there were in 1951. It seems likely that this increase should in part at last be due to the improved health services: the monthly clinics, with the possibility of immediate referral of young children to the Saiho hospital, do save a number of lives, even if the mortality rate is still high.

166 The migration of young women into and out of Sivepe is a continuous process due to virilocal residence; a far more significant demographic process is the outflow of men as a result of labour migration. Rimoldi reported that ten male siblings and sons of householders of his (Jegase-Timumu) sample were employed outside Sivepe in 1962; in 1966, I found that this figure had risen to 12. I have only included men who had been residents of Sivepe and who had left, as adults, to find work. By this criterion, it would not be possible to class absent brothers and sons of Sorovi men as "labour migrants from Sivepe," as these men had never lived in Sivepe at any time but had been residents of Gurombi before they became labour migrants. There were, at the time of the survey, no labour migrants of the Seho clan. The fact that Jegase had many labour migrants while Seho had not even one certainly accentuated the relative dearth of contact with the outside world that characterised Seho. On the other hand, we should not read too much significance into it. It so happened that the Seho men came from very small families; most of them actually had no adult brothers living, and though they had many children, the only adult children they had happened to be girls. Thus they collected a disproportionate amount of bridewealth but could not contribute much to the external labour market. The Seho men were not actually as cut off from the world as these statistics might suggest: all had sisters' sons and sisters' husbands, real or classificatory, who were labour migrants; two had themselves been labour migrants earlier in life. In

A [See Cat. 116, p. 225--Analyst]

657 Garombi was a somewhat delapidated settlement. The government
621 and the council were said to favour its dissolution and incorporation
into Sivepe and Binduta. This project was favoured by Sivepe which
166 was keen to enlarge its size. Sivepe could see that under the modern
167 dispensation, the greatest favours always went to the largest villages.
The large villages had shops, water supplies, a club house; the coffee
truck stopped there, and so on. There was also a prize for the most
improved village; here, too, size was thought an asset. In council
elections and many other contemporary situations, size meant power.
Sivepe was therefore eager to absorb these families, hoping that more
would follow. During the year of my visit, there were several meetings
about this with Garombi people; rumours of further migration were
hopefully spread around.

161 In contrast, Inonda slightly dropped in population in the period
[464] under consideration. There was the same rise in the number of children;
[166] there was little loss through labour migration (only one man in 1962;
[621] as Crocombe and Hogbin report; and still only one today). The decline
in the number of households was due to dissensions; the households
shifted to neighbouring Ureo and Hohota. Perhaps this decline may be
explained by the strong leadership exercised by one family--socially,
economically and ritually--so that anyone who fell out with that family
more or less had to leave. In contrast, Sivepe has several strong
personalities who had to make compromises with one another. Sivepe's
post-eruption development was shaped not by one dominant figure but
by several, each making a specific kind of contribution. Certainly,
there was factionism, but there was also balance between the rivals.
In the next two chapters, I shall deal with these two kinds of
internal pressure: the character of the key personalities and of their
rivalry.

Section 2: Physical Environment

131 The present territory of Hohorita stretches from near Mount
133 Lamington (an elevation about equal to that of Sivepa) down to Double Crossing, which is about 600 feet above sea level. Rainfall at the top of the territory may be close to that of Sivepe, but further down
132 it decreases--though I doubt whether it would fall much below 150 inches per year anywhere on Sangara territory. The land yielded much the same wild and cultivated crops as in Sivepe. Before the eruption, the
361 concentration of population was entirely at the higher reaches of this territory, while the lower parts were used for hunting and other subsidiary activities. Those who survived the eruption because they were away from their villages were often hunting on this lower land. Today, the pattern of occupation has shifted. The lower part of the territory, near the new villages, is intensively used while the more elevated land is used a little less and often for coffee rather than subsistence crops.

731 The eruption has made minor changes to land contours: due to the floods, the watershed of the Ambogo River was gouged out forming a number of pools of stagnant water which formed a breeding ground for mosquitoes and leeches. These pests are blamed on the eruption by the local people. On the credit side, certain varieties of bananas and pumpkins, planted before the eruption, had the opportunity to grow wild during the year the land was unoccupied and are now thought of as having been brought to the district by the eruption.

162 The total Sangara population today would be about 472--of which
161 350 live in Hohorita and the rest in the three other villages. The total land holdings of this population extend over 3.5 square miles--an average of about 135 per square mile. This places the Sangara in a somewhat superior economic position to Sivepe, which has to support at least 180 persons per square mile on land of the same quality. It must be remembered that prior to the eruption, the Sangara population was six times as large as it is today--so that Sangara must have suffered a chronic land shortage. All the neighbours of the Sangara are agreed that they were very warlike and dangerous enemies; they probably were in frequent need of extra gardening land. Today, they have enough land not only for subsistence gardening but also for a somewhat larger cash-cropping programme than is generally found in the Sasembata district.

621 The present site of Hohorita (see Map XIV) developed in several
361 stages. First the Horeopa clan, which had the greatest number of survivors and therefore achieved dominance, shifted to the front part of Hohorita village in 1956. The mission station was established next to the village, separated from the village by a small stream. By 1958, all the Horeopa were settled in houses in the new village, together with the Oripa clan whom they had asked to join them while all the other inhabitants of Irihambo had shifted to the new mission
A [See Cat. 116, p. End Map 13--Analyst]

of them made frequent visits to Popondetta and there met urbanised Sangara. A group used to meet in the hotel for what were often political discussions arising out of current events and rumours. This emphasis on the political and ideological reminded me of what I had seen among the Maori, the Indonesians and what is reflected in recent African studies: the kinship universe is crosscut by other ideas presupposing a political centre, centralised power, fundamental social and economic changes. The presence of Papuan public servants made much difference here. For instance, nobody in Sivepa, discussing savings accounts, would have thought of telling me that there are 54 cooperative societies in the district only four of which are Savings and Loan Societies. This group knew the pulse of the Northern District in concrete factual terms while Sivepa relied on disconnected phenomena that happened to drift into their ken and from which their suspicions and hopes shaped an image sustained by the stories of their councillor.

## Section 5: Internal Influences of the Eruption

Compared to the two sample villages, Hohorita is a more densely concentrated settlement, with 348 inhabitants in 41 houses. When I was there, there were still two clearly separated araha; the dominant clans of the front village section were Horeopa and Oripa; in the back, Basupa and Sehopa. But within each section, there was no striking separation of the clans into "sides" as in villages in the Sasembata district. House distances were as at Sivepa.

In contrast to Sivepa, there is no tendency for clan groups to fuse, 12 independent names being given to me. This number can be somewhat reduced if we ignore those clan names represented by a single family where the wife belongs to one of the major Hohorita clans--the wife is then the "sponsor," in Fischer's sense, of the household. Thus, two of the clan names given to me belonged to immigrants from the Sasembata district who had married into Sangara. For all practical purposes their allegiance lay with the clan of their wives. The other clan names were all Sangara, representing survivors from numerous pre-eruption villages.

In household composition, the smaller settlements of Sombou and Kakita rather resembled Sivepa, but in Hohorita three-generation households were more common and bachelor's houses were not found. Furthermore, many children were left parentless through the eruption and these were adopted by Hohorita households, especially by childless ones. As a result, childless households in Hohorita are far rarer than in Sivepa. A considerable number of marriages and remarriages occurred immediately after the eruption. The sharp drop in population, furthermore, left Sangara with plenty of land for the survivors, so that 25-35 year age group is far better represented in Horotia than in Sivepa.

to get out from under the direct control of Government and that everything was "subordinated to this end." Those who had title to land outside the closed area and wished to get to it, readily agreed to official plans for resettlement, including the village building program. Those whose land was inaccessible—too far off the road or in the danger area—attempted to obtain permission to occupy land of kinsmen or others who might be willing. The most immediate objective was to break in gardens and to reduce or eliminate the need for rations, emergency wild foods, or daily treks into the closed area for salvage produce. Here difficult problems are foreshadowed. This pattern of settlement will be possible only on a short term basis. For longer occupation the people will either have to scatter out in widening areas to make their further seasonal shifting gardens, or else make the radical change to sedentary gardening which has no appeal to most of them.

The situation is made more serious by the fact that the safe land tracts are, in general, less fertile than the devastated higher slopes; these and comparable areas elsewhere do not carry such relatively dense settlement.[9] Mr. H. T. Plant, an officer with anthropological training, made a quick survey of land tenure and social structure in the resettlement zone on the Wairopi side. On this basis he estimated that with only about five acres at hand per person, or approximately 100 people to the square mile, the available land is inadequate by New Guinea standards to support the population. In April, Belshaw found that great uncertainty surrounded land use problems. There were frequent moves, uncertain titles, disputes over tenure, and conflicting authority among the hamlet and clan leaders. He predicted that it might take months to sort out the economic and social threads involved. It will take far longer to build up seed stock, domestic animal herds, and other bases for normal living, as well as the large quantities of food required for the proper ceremonies for the dead which will eventually be held. In due course other settlement areas than those immediately occupied will need to be found for people still in the camps.

Government and Mission personnel were ready to offer judgements on Orokaiva behavior in the crisis situation, and camp records had some objective data to the extent that people broke the law, entered hospital with wounds, or otherwise came under official purview. In addition to the "sense of guilt" already mentioned, there was said to be considerable "anxiety," "irritability," "excitability," and "quarreling." The legal record shows several sharp clashes where injuries were inflicted, wife-beatings, and other kinds of quick tempered violence. Under extreme provocation, it was said that they might "throw hysterical fits." An obvious source of early tension came from not knowing the fate of missing clansmen. Officials denied knowledge of any significant mental derangements beyond the scattering of instances known previously.

The Oro Bay camp inhabitants appeared to be under by far the most stress and strain. Here, out of sight of the

9. Williams, after referring to the rich Lamiagina slopes, says: "A somewhat discouraging contrast is found in the forests of the plain proper, which are sometimes gloomy and waterlogged . . . and of wholly inferior quality" (*Orokaiva Society*, p. 12).

25: Schwimmer E-5 (1966-1970) 1974 QJ23 Orokaiva QJ23



Rich data on the symbolism defining the *philia* relationship in religio-philosophic terms are available in Strathern (1971). I have already expounded elsewhere (Schwimmer, 1972) that the theme of *philia* (its establishment, disruption, and restoration) is a central issue in New Guinean thought and that it enters into many levels of culture: geographical, zoological, social, magical, religious, and aesthetic.

## THE OROKAIVA CASE

Up to this point, I have given some empirical illustrations of simple analytical distinctions. Thus, we can no longer take for granted that the *philia* universe always consists of friends and kin for it may define all friends as kin (as in the Maori) or vice versa (as in the Telefolmin). On the other hand, there are societies where the distinction friend/kin is of subordinate importance because the *philia* universe is classified by different criteria such as cooperative/competitive (Tangu) or real/feeble (South Fore). Then again, there are societies where consanguinity is a distinctive criterion within the *philia* system, but only in combination with other factors (Melpa).

If the Orokaiva case, of which a description now follows, seems more complex than the preceding ones, this may be attributed, at least to some extent, to my method of presentation. While most Oceanic sources are too brief on the subject of friendship to enable us to go beyond summary statements,[5] the Orokaiva facts resemble those reported by Burridge (1957a; 1969) in many respects. But in some respects, the Orokaiva system seems more explicit. It differs from Tangu in having a slightly stronger patrilineal emphasis, less emphasis on collateral relations, and a stronger avoidance of affines. The Orokaiva marriage system, reported elsewhere (Schwimmer, 1970a), seems more highly structured. These factors are probably related to higher population density, larger social networks, higher soil fertility, and more pervasive warfare.

The Orokaiva (population 25,000) live on the fertile volcanic loam of the Mount Lamington foothills. Their main crop of taro once supported villages of six to twelve families, although now, the villages are often larger mainly because of pressure from the Australian administration. Williams (1928, 1930)[6] characterized the society as patrilineal with a strong bilateral emphasis. Women hold a relatively high position which is maintained

5 Early accounts of New Guinea friendship relations are in Mead (1938) and Williams (1940). Later accounts of a *namel* type of relationship are in Pouwer (1955) and Hogbin (1964) and of the *otavo* type in Heider (1970), Oliver (1955), Schoorl (n.d.). The "resemblance friends" found by Williams among the Elema are not unlike the fictive *simbo* of the Orokaiva.

6 Other useful sources on Orokaiva social organization are Crocombe and Hogbin (1963), Rimoldi (1966), Krinks and Waddell (1968), Schwimmer (1967, 1969, 1970a, 1970b, 1970c, 1972).

26: Schwimmer E-5 (1966-1970) 1974
OJ23 Orokaiva OJ23


phasis on the "logic of the concrete," is equally insistent on precision in matters of material culture, because in the analysis of symbols it often happens that important distinctions are made between species, varieties, subvarieties, methods of food preparation, of the manufacture of objects, and the like. 121

Quite apart from this concern with meticulous classification, componential analysis, and lexical-semantic relations, it seems to me profitable to turn to the semiotics of material objects, especially if the field of connotation and denotation crosscuts numerous levels of conceptualization. There are some objects in every culture which may almost be regarded as "total phenomena" in the Maussian sense: they are at once of economic value, expressive of social relations, ploys in a political strategy, and religious symbols. They also appear as the subjects of myths. As a general rule, they are utilized as objects of exchange, which explains why they are as multivalent as exchange itself.

At least part of their significance in anthropology lies in their capability to link the levels of myth and ritual. The best way of explaining what I mean by this suggestion is to give some instances of semiotic analyses of objects which may be called "total phenomena," and include in these analyses the levels of both myth and ritual. Their role as "logical operators" linking these levels will then become obvious. Though my argument draws on a wide range of structuralist literature, the most important sources are Lévi-Strauss' introduction to Mauss' *Sociologie et anthropologie* (Lévi-Strauss 1950) and the Finale of *L'Homme Nu* (1971).

The ethnographic data are from the Orokaiva, a tribe in the northern district of Papua, where I did fieldwork for one year in 1966–1967 and for another three months in 1970.[1] The Orokaiva live on the fertile slopes of Mount Lamington. They are swidden agriculturists, whose main crop is taro, while yam, sweet potato, sago, sugar cane, coconut, and numerous other nuts, as well as latterly German taro are subsidiary crops. Areca grows in most of the district. The population of 25,000 is very dense on the actual slopes of the volcano, sparser in the riverine areas. The kinship system is patrilineal, with a strong bilateral emphasis. I have given a detailed description of the various forms of

101 131 241 161 361 602 114 582